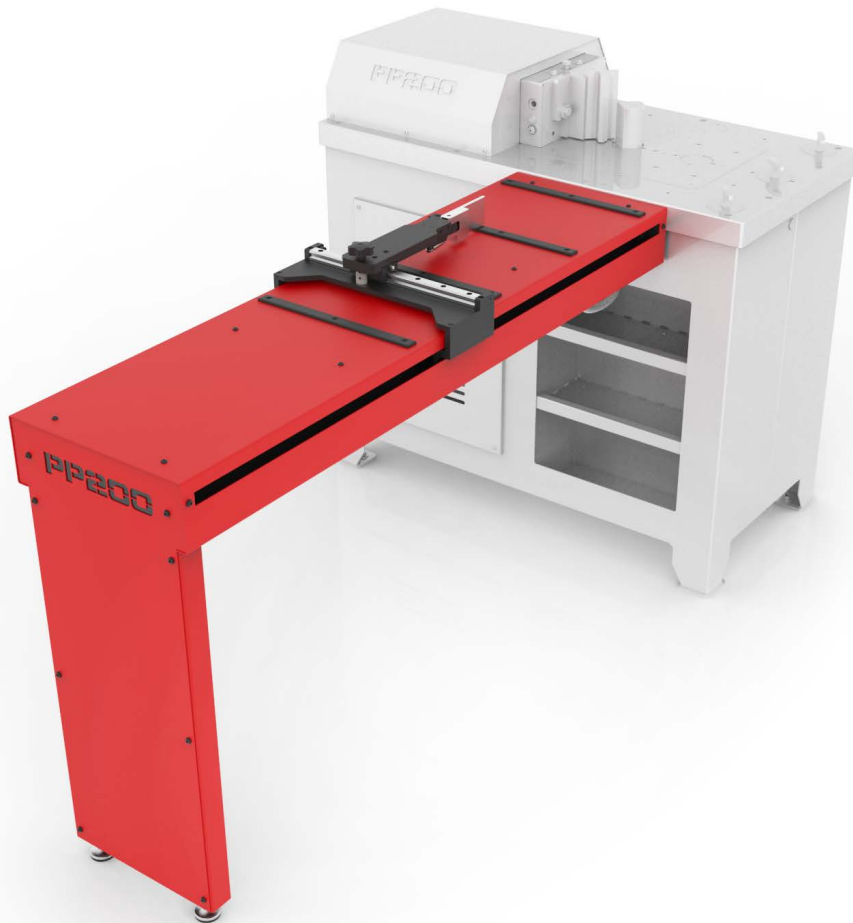




INSTRUCTIONS BOOK

AUTOMATED GAUGE HORIZONTAL PRESS BRAKE PP200CNC



PRADA NARGESA, S.L

Ctra. de Garrigàs a Sant Miquel s/n · 17476 Palau de Santa Eulàlia (Girona) SPAIN

Tel. +34 972568085 · nargesa@nargesa.com · www.nargesa.com

CONTENTS

1. ACCESSORY DETAILS	8
1.1. Accessory Identification	8
1.2. Dimensions	8
1.3. Accessory Description	9
1.4. General Characteristics	9
1.5. Machine Parts	10
1.6. Protectors	11
2. TRANSPORTATION AND STORAGE	12
2.1. Transportation	12
2.2. Storage Conditions	13
3. MAINTENANCE	14
3.1. Greasing the Moving Parts	14
3.2. Timing Belts	15
4. GAUGE LOCATION AND INSTALLATION	16
4.1. Gauge Location	16
4.2. Dimensions and Work Area	16
4.3. Acceptable External Conditions	17
4.4. Installing the Gauge	18
5. GAUGE CONFIGURATION	22
5.1. Axes	22
5.2. Activating the Gauge	22
5.3. Setting Elevation 0 on the Gauge	24
6. INSTRUCTIONS FOR USE	30
6.1. Gauge Features and Use	30
6.2. Features of the Longitudinal and Cross-Sectional Cart	30
6.3. Wedge Positioner	31
6.4. Flat Positioner	33
TECHNICAL ANNEXES	35

NARGESA CLIENTS

Prada Nargesa has more than 8.000 customers around the world. Some of our clients, those who offer service to third parties with the Nargesa machinery in their workshops, have been pleased to be part of this network that aims to connect them with possible future clients. In this way, all those people or companies that have a need for any part or tool that can be manufactured by using the Nargesa range of machinery, will be able to find a solution in their area to be able to satisfy their production requirements by hiring their services.



We have more than 8.500 customers in 150 different countries around the world

Discover its location on the interactive map on our website!

DO YOU WANT TO PARTICIPATE?

Send an email to nargesa@nargesa.com, include the following information and we will add you to this list.

We want to encourage all those who haven't participated yet in this great comercial network!

1. Company name
2. CIF/Tax Code
3. City
4. Country
5. Machine or machines

PRADA NARGESA

Prada Nargesa S.L. is a family business founded in 1970 located near Barcelona, Spain, with more than 50 years of experience in the sector of manufacturing of industrial machinery, and more than 10.000m² of facilities. Nargesa is a symbol of quality, reliability, warranty and innovation.

Our whole range of machines and accessories is manufactured entirely in Nargesa. We have a constant stock of 400 machines, and we have more than 16.800 machines sold all over the world.



OUR RANGE OF MACHINERY

Ironworker Machines
Ring Roller Bender and Pipe Bender
Non-mandrel Tube and Pipe Bender
Twisting / Scroll Bending Machines
Horizontal Press Brakes
End Wrought Iron Machines
Gas Forges

Iron Embossing Machines
Hydraulic Shear Machines
Hydraulic Press Brakes
Presses for Locks
Broaching Machines
Power Hammers

CERTIFICATES

Prada Nargesa has several certifications that backup both, the design and manufacturing processes, as well as the journey through exporting our products around the world and the quality of the manufacturing components we use for our machines. These facts turn into real advantages for our customers:



AUTHORIZED EXPORTER

- Faster customs procedures
- Reduction of tariff documentation
- Tariff preferences according to geographical location



Válido hasta el 31 de mayo de 2026



INNOVATIVE SME

- Development in innovation, design and manufacturing technologies
- Certification and audit of efficiency in product and service
- Ability to foresee customer needs



R+D+I MANAGEMENT

- Manufacturing based on the R+D+I process
- Technological surveillance system

SUCCESS STORIES

At Prada Nargesa we believe that the testimony of our clients is our best guarantee, and that is why we like to expose some of the success stories that we have witnessed around the world:



Discover its location on the interactive map on our website!

DO YOU WANT TO PARTICIPATE?

Send an email to nargesa@nargesa.com including the following information and we will add you to our website:

- Company name
- Testimonial name
- Post in the Company
- Country
- Descriptive text
- Photography with the machine

1. ACCESSORY DETAILS

1.1. Accessory Identification

Make	Nargesa
Accessory type	Automated positioning gauge
Model	PP200

1.2. Dimensions

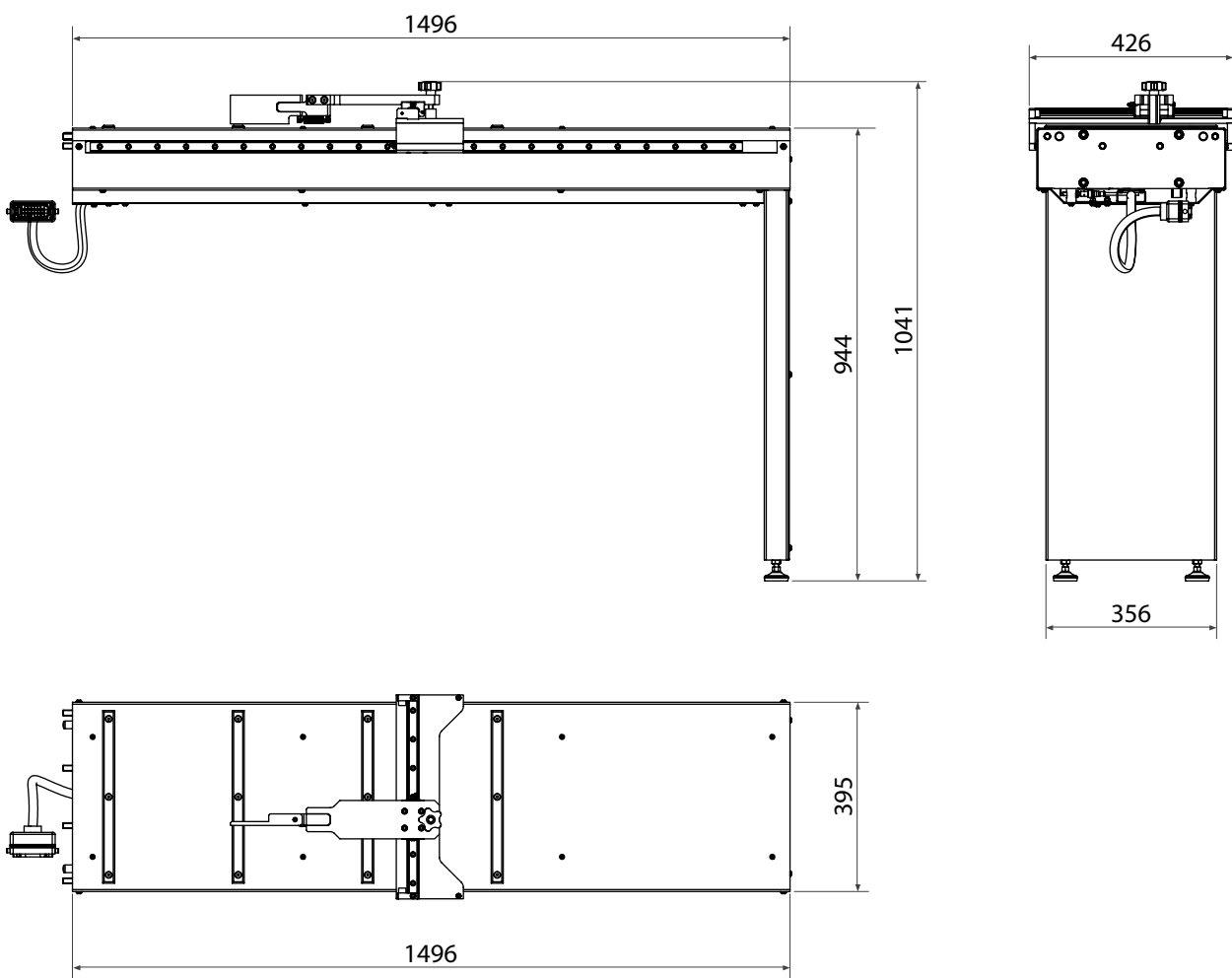


Figure 1. Outside dimensions for the PP200CNC Horizontal Press Brake gauge

1.3. Accessory Description

The automated gauge is an accessory specifically designed to optimize the performance of the current PP200CNC Horizontal Press Brake as it offers the possibility of automatically positioning the X-axis for the different programmed operations which are calculated with the CNC ESA S625 control, thus enhancing the performance and work quality features of this machine.

The PP200CNC automated gauge makes it possible to produce unique and serial parts faster with more precision and repetitiveness than the previous manual system. The main characteristics and features are:

- A drive system that works with an ESA servomotor and HTD timing belts to enable automatic X-axis positioning with a precision of ± 0.02 mm.
- Manual adjustment of the cross-sectional cart, Z-axis, to cover all operational possibilities offered by the PP200CNC Horizontal Press Brake: bending, punching, curving...
- Longitudinal movement of both carts with high-precision linear guides and ball recirculation skids.
- Automatic anti-collision control managed by the PP200CNC Horizontal Press Brake software.
- Easy mechanical and electrical installation for fast preparation and start-up by the user.

PRADA NARGESA S.L. is not liable for any damages that may be caused due to improper use or a breach of the safety rules by users.

1.4. General Characteristics

Reference	140-16-01-50000
Electrical motor	Servomotor 0.9 Nm, 0.520 kW, 5000 rpm
Voltage	480 V, 400 V, 220 V Three-Phase 220V Single-Phase
Length of the X-axis run	1210 mm
Length of the Z-axis run	300 mm
Movement speed	1000 mm/s
Positioning precision	± 0.02 mm
Repetitiveness	± 0.02 mm
Maximum structural load	2,000 kg
Dimensions	1496 x 1041 x 426 mm
Weight	115 kg

1.5. Machine Parts

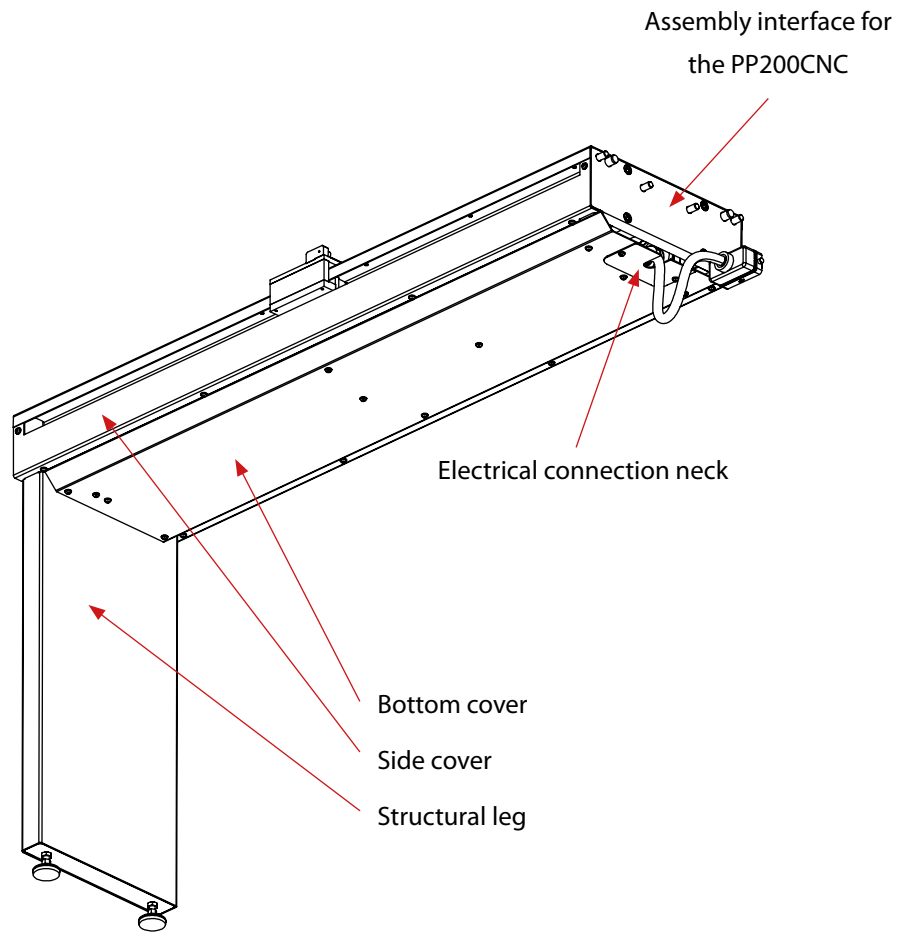
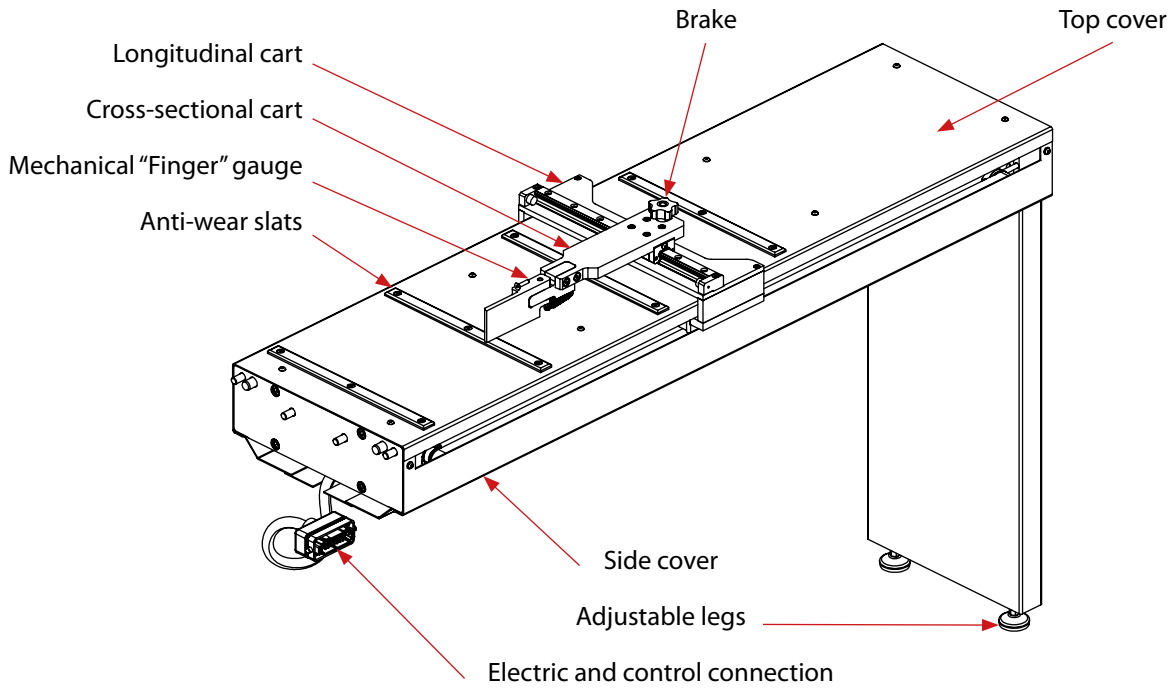


Figure 2. Automated gauge parts

1.6. Protectors

The motor, pulleys, timing belts and electronic components that make the automated gauge work are embedded in the structure. These components are protected from any involuntary handling, entrapment and impurities with different side, top and bottom covers.

All of these protectors are designed for easy removal in order to do all installation and maintenance work required with comfortable access.

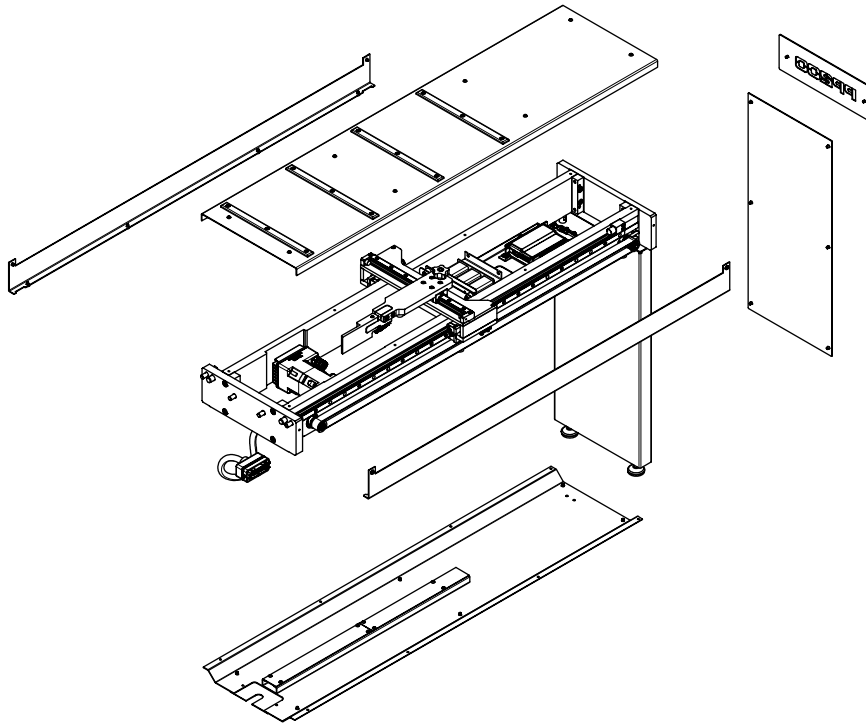


Figure 3. Blow-up view of the protectors on the PP200CNC Horizontal Press Brake gauge

Working without the protectors on is ABSOLUTELY PROHIBITED.
They may only be removed for maintenance or to repair a breakdown, as necessary, and always when the machine is completely off.

2. TRANSPORTATION AND STORAGE

2.1. Transportation

The packaged gauge should be transported as follows:

Along the bottom under the pallet at the base of the box using a forklift or lift truck. Do not raise the box more than necessary to minimize the risk of overturning and, as a result, falling from heights.

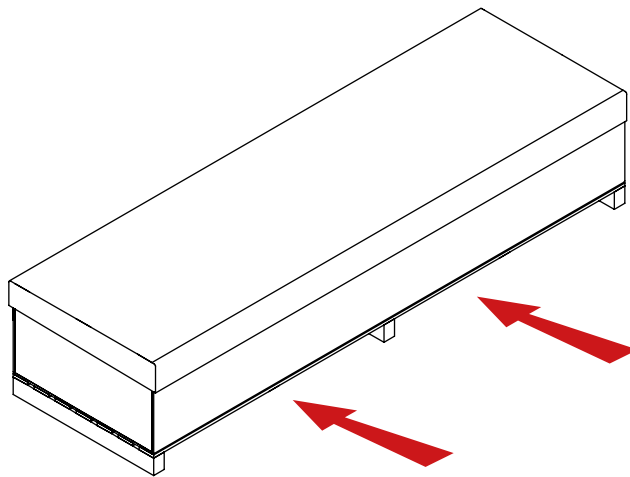


Figure 4. Recommendation for transporting the packaged gauge

To remove the main structure from the packaging, use the 4 M6 eyebolts that come with the gauge. To do so, simply remove the 4 middle screws from the top cover, as shown in the image below, and place them in the correct position along with the 4 nylon washers to prevent paint damage.

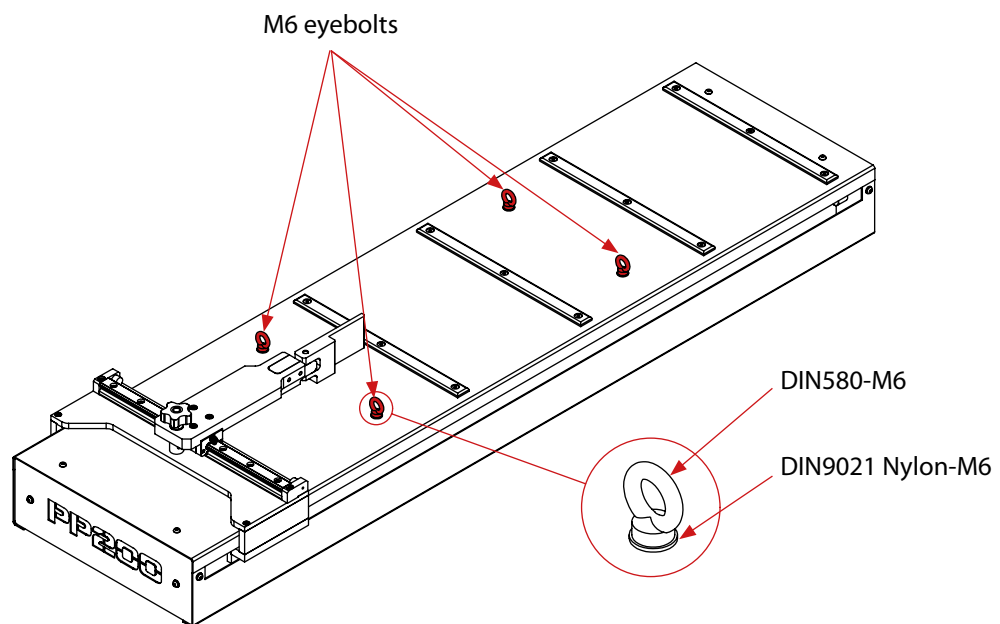


Figure 5. Recommendation on moving the main gauge structure

2.2. Storage Conditions

The PP200CNC Horizontal Press Brake gauge should be stored in a place that meets the following environmental conditions:

- Relative humidity between 30% and 95%.
- Temperature between 0°C and 60°C.

Do not stack heavy objects above the box.

3. MAINTENANCE

3.1. Greasing the Moving Parts

Keeping the moving parts in the gauge linear guide system clean of any impurities and well lubricated is highly recommended to ensure proper functioning and an extended useful life for all parts.

Initial greasing of the gauge linear guide system is done at the Nargesa premises. Nonetheless, keeping the ball recirculation skids properly greased is absolutely necessary. The following is recommended:

- Regrease the skids with 5.8-6 cm³ every 300/400 operating hours/6 months.
(Instructions subject to normal operating conditions and clean atmospheres.)
- Use lithium-based, low-viscosity lubricants.
- DO NOT use lubricants with MoS₂ or graphite.
- Keep the skid scrapers clean without any excess lubricant.

For environments with severe conditions of use and impurities, shorten the recommended greasing frequency by half.

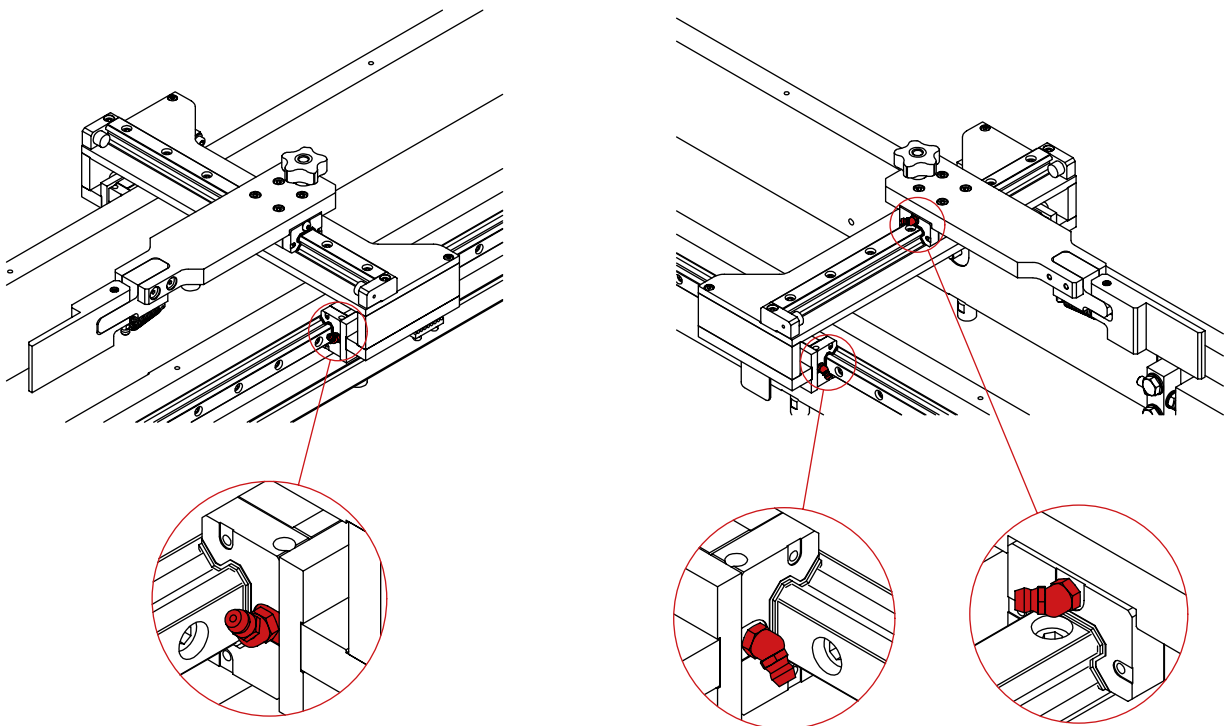


Figure 6. Detailed view of the greasing points on the ball recirculation skids

ATTENTION: To grease the gauge, you must stop the machine and press the "Emergency stop" button.

3.2. Timing Belts

The synchronous belts that provide the linear movement for the longitudinal and cross-sectional carts on the gauge are HTD® 5M. This type of belt does not require maintenance as far as lubrication and re-tensing. However, for prevention purposes, routine inspections of the parts, as well as checking certain aspects to ensure proper operation and durability of the gauge transmission system are recommended.

A quick visual and sound inspection should be done monthly and, depending on how much the gauge is used, a complete system inspection should be done at an interval of 3-6 months.

- Make sure there is no premature wear on the pulleys or belts (cracks, broken areas, signs of abnormal teeth wear, etc.).
- Check for any odd noises or vibrations from the pulleys and bearings.
- Make sure the belts are aligned properly.
- Make sure the transmission parts do not overheat.
- Check the tension on the belts. (Re-tensing this type of belt is not necessary; nonetheless, check that the tension has not suffered from any variations with respect to the initial assembling taring.)
- Keep the pulleys and belts clean of any incrustation and lubricant.

Details on the assembly and location of the transmission components are provided below in case an inspection reveals a need to replace or change any of them.

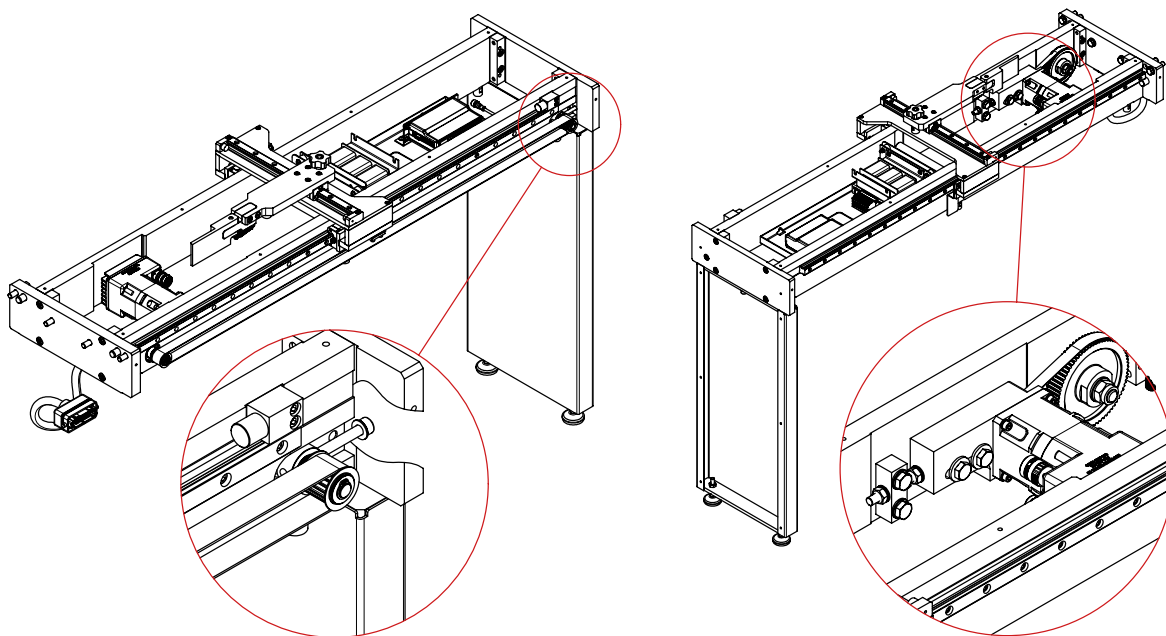


Figure 7. Detailed view of the pulleys and transmission system belt tensors

4. GAUGE LOCATION AND INSTALLATION

4.1. Gauge Location

Before installing the gauge, try to position the PP200CNC Horizontal Press Brake in the proper location so that it does not have to be moved; otherwise, follow the steps described in section "2.1. Transportation" of this instructions manual.

Given the versatility of use of the PP200CNC, having sufficient space to work, especially around the perimeter of the machine, is advisable considering space needed depends on the tools, the shape and lengths of the pieces being worked on at any given time.

4.2. Dimensions and Work Area

Once the gauge is assembled on the PP200CNC Horizontal Press, the assembly dimensions (layout), the work area of both and the lengths of any possible pieces or profiles to be worked on must be taken into account.

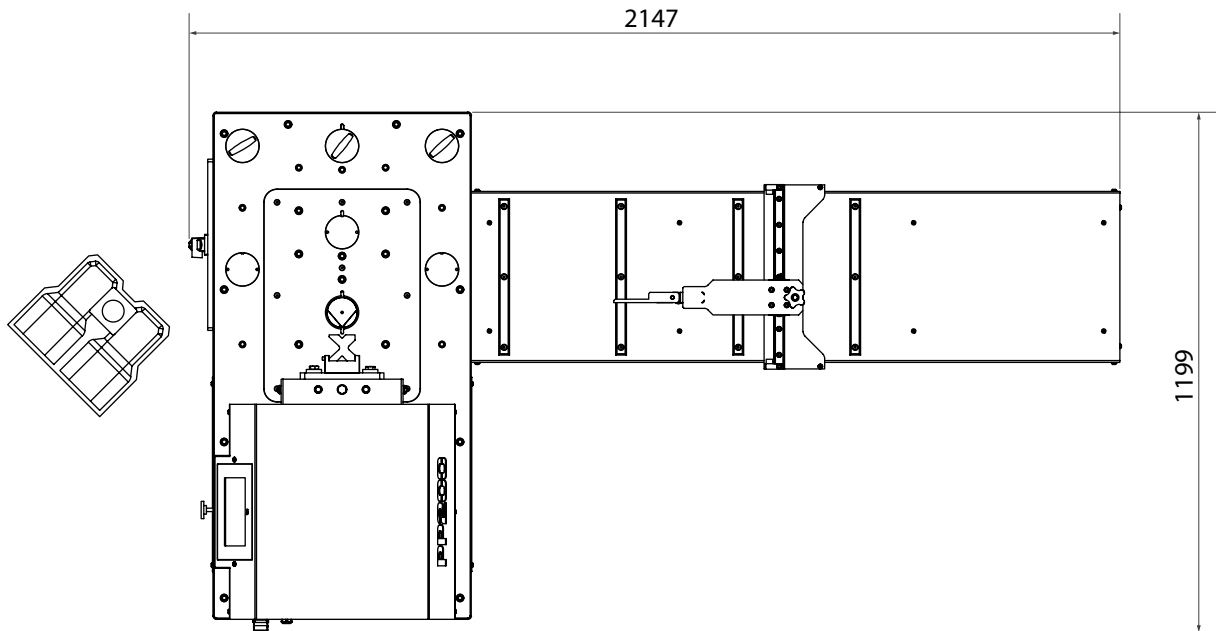


Figure 8. Layout and dimensions of the PP200CNC and gauge

As concerns the work area, the operator should stand at the front of the machine or on the right side opposite the digital control panel, always taking the drive system pedal with them. This way, all of the machine features can be controlled such as manually adjusting the gauge cross-sectional cart for any type of work to be done.

The following figure shows a diagram of the maximum work area necessary for the gauge using it in this case for bending at the maximum working length.

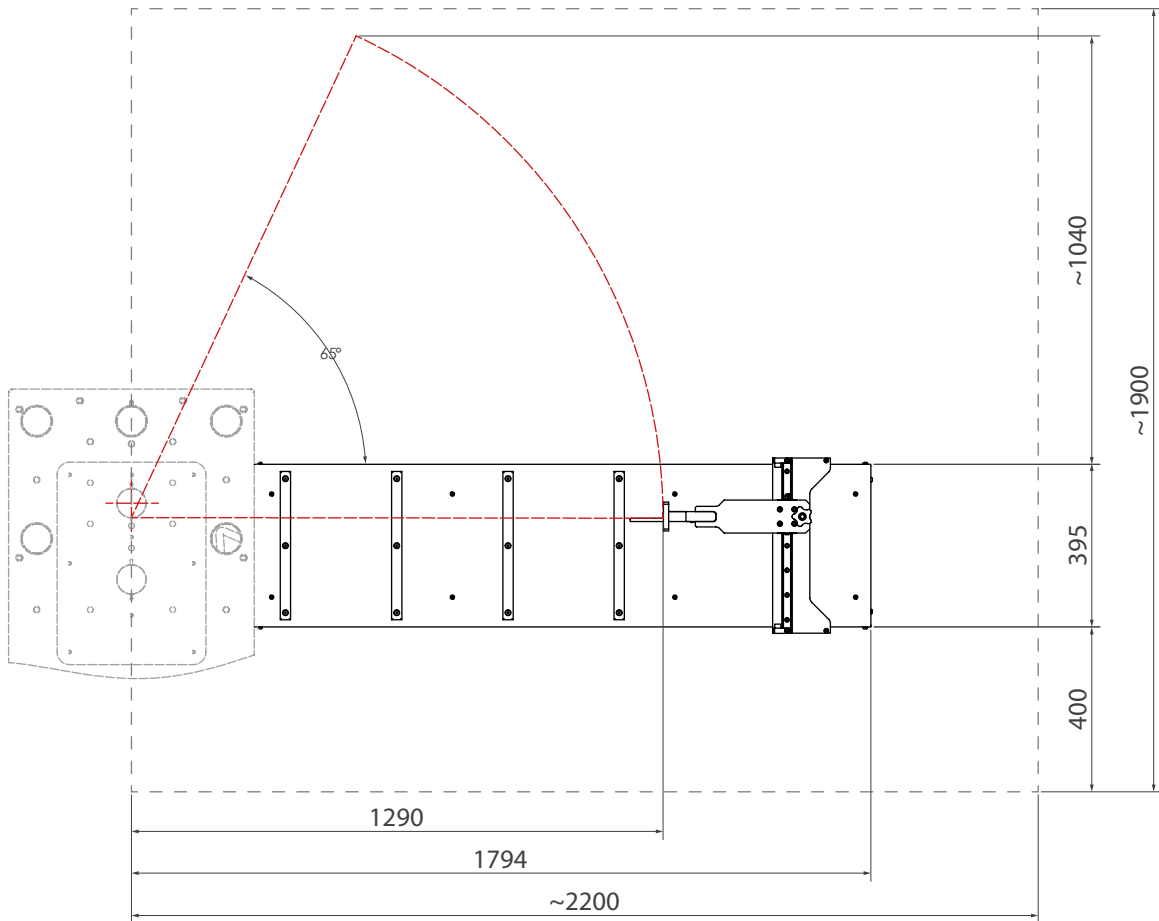


Figure 9. Automated gauge work area

ATTENTION: The gauge moves while the machine is operating. Avoid placing anything in the gauge work area which could obstruct such movement.

4.3. Acceptable External Conditions

- A room temperature of between +5°C and +40°C without exceeding an average temperature of +35°C over 24 hours.
- Moisture between 30 and 90% without water condensation.

4.4. Installing the Gauge

You'll find the gauge partially assembled in the packaging for quick installation. It's divided into only 2 parts: the structure or main body and the structural leg. Follow these steps for proper installation:

1. Remove the packaging and place the main body on a work bench or elevated surface between 800~900 mm to be able to comfortably complete the following assembly operations. Leave about 150 mm clear on the support surface at the back of the gauge, as indicated in the figure below.

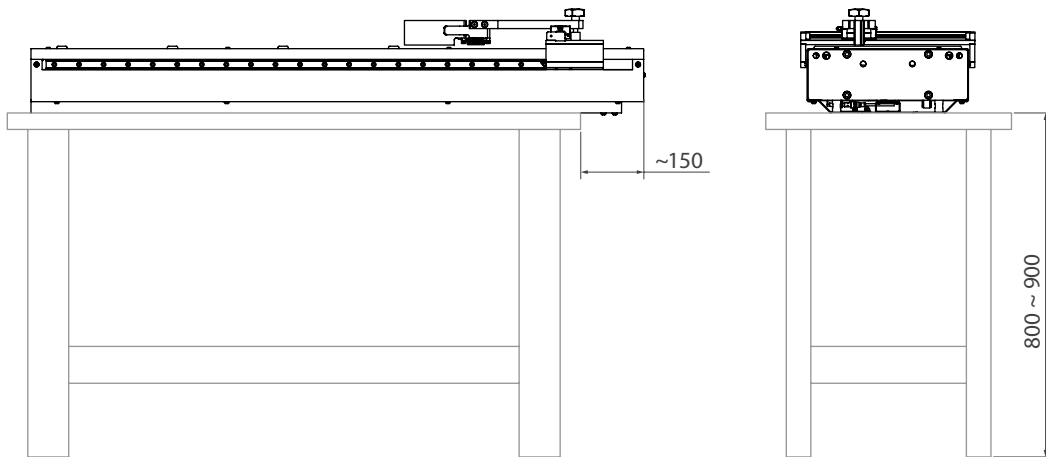


Figure 10. Position of the main body on the work bench or elevated surface

2. Screw the structural leg to the main body, taking advantage of the clear support space left before. To do so, remove the cover screwed to the back of the leg to access the anchoring interface comprised of a plate on the top and three DIN912 M10 screws. Keep the cover off the leg for subsequent work.

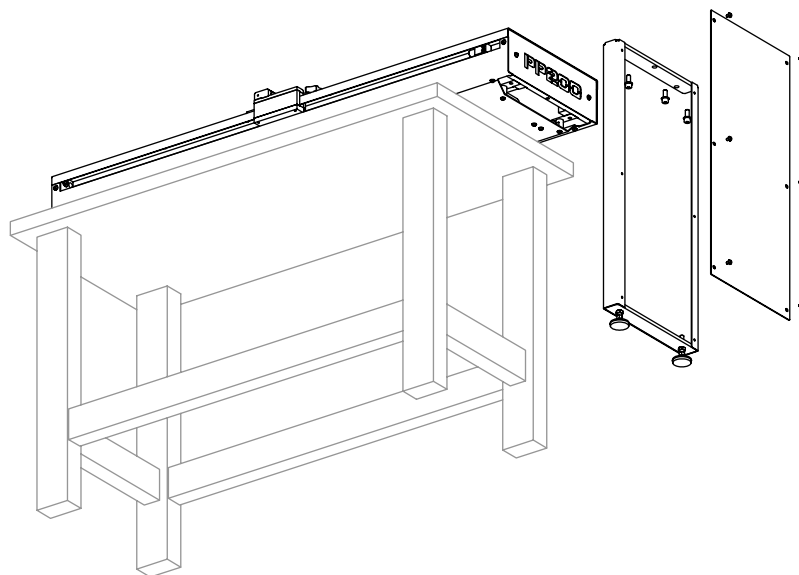


Figure 11. Assembling the structural leg to the main body

3. Once the two gauge parts have been assembled, prepare it all for installation on the PP200CNC Horizontal Press. To do so, remove the eight screws and move the top cover slightly away from the gauge, about 200 mm, leaving access to the machine assembly interface. This is located on the front plate and is comprised of two Ø16x40 pins and four M12x50 screws.

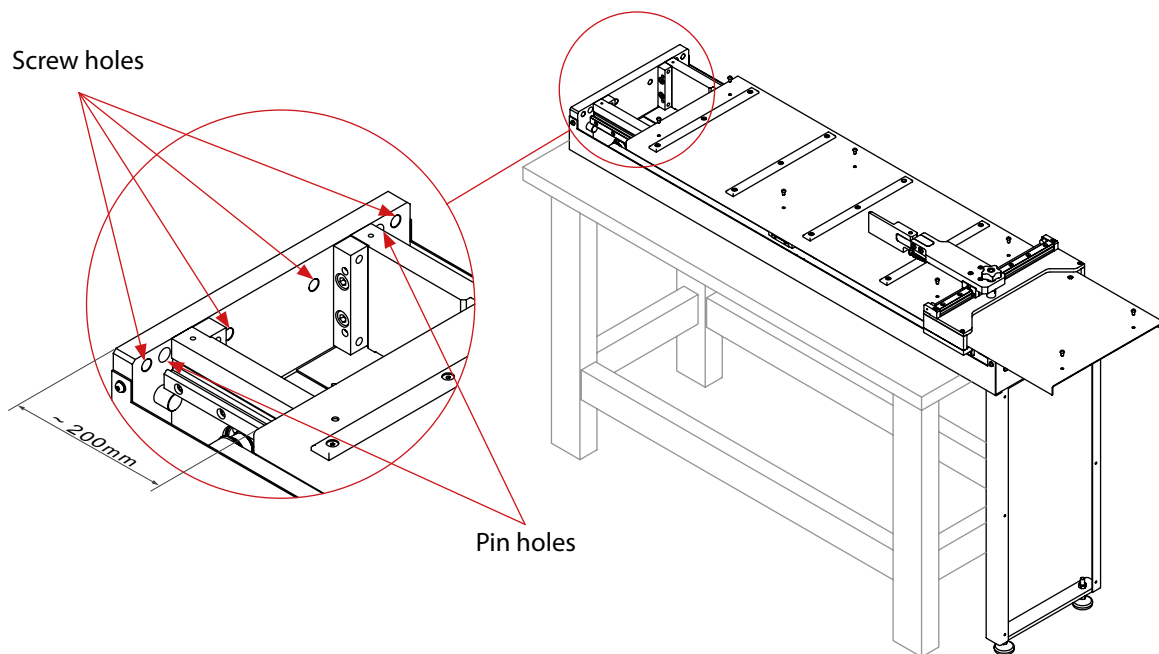


Figure 12. Assembly interface with the PP200CNC Horizontal Press under the top cover on the gauge

4. Before assembly, make sure the machine is level to guarantee proper assembly and prevent any sudden vibrations and movements during the work to be done.

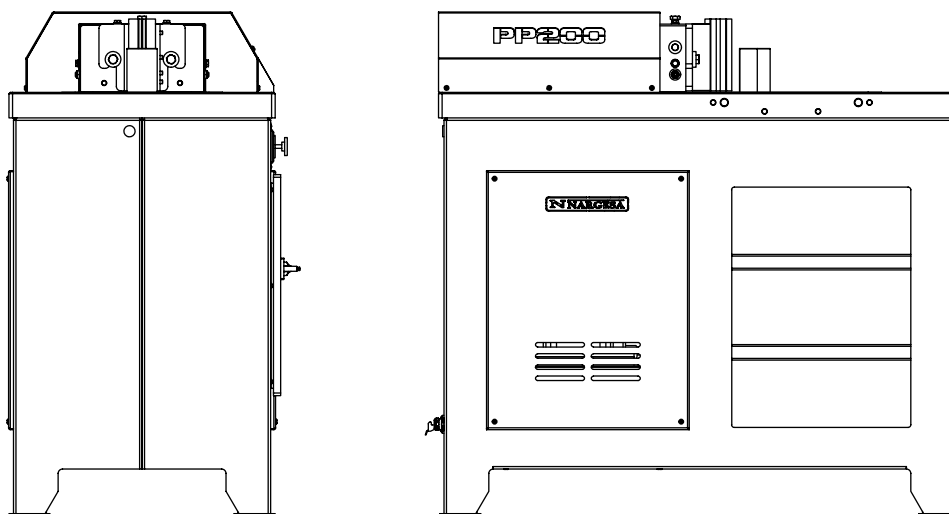


Figure 13. Levelling prior to assembly of the PP200CNC Horizontal Press

5. The gauge shall be directly installed on the left side of the PP200CNC table. To do so, first insert the $\text{\O}16\times40$ pins into the machine assembly interface. Then, put the gauge in the correct position and assemble the four M12x50 screws, making sure there is proper contact between both assembly interfaces.

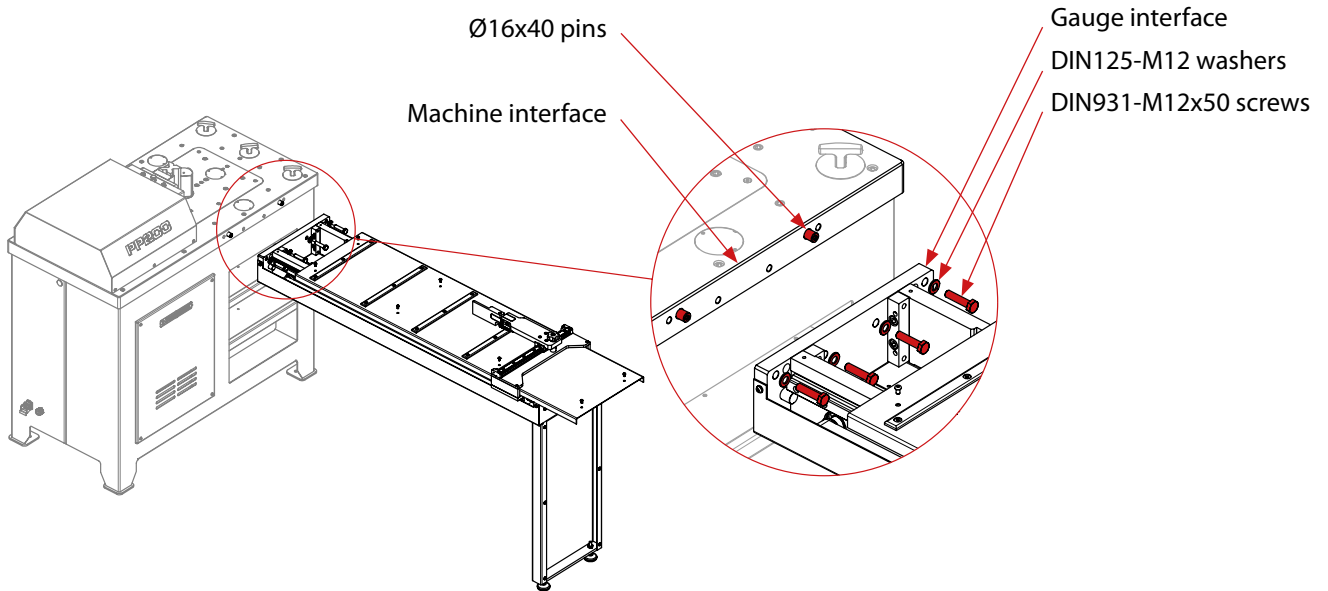


Figure 14. Detailed view of the gauge and PP200CNC interfaces and assembly parts

6. After doing the complete assembly, simply check that the gauge is level. It can be adjusted to absorb any imperfections in the ground by adjusting the two height adjustable legs under the structural leg.

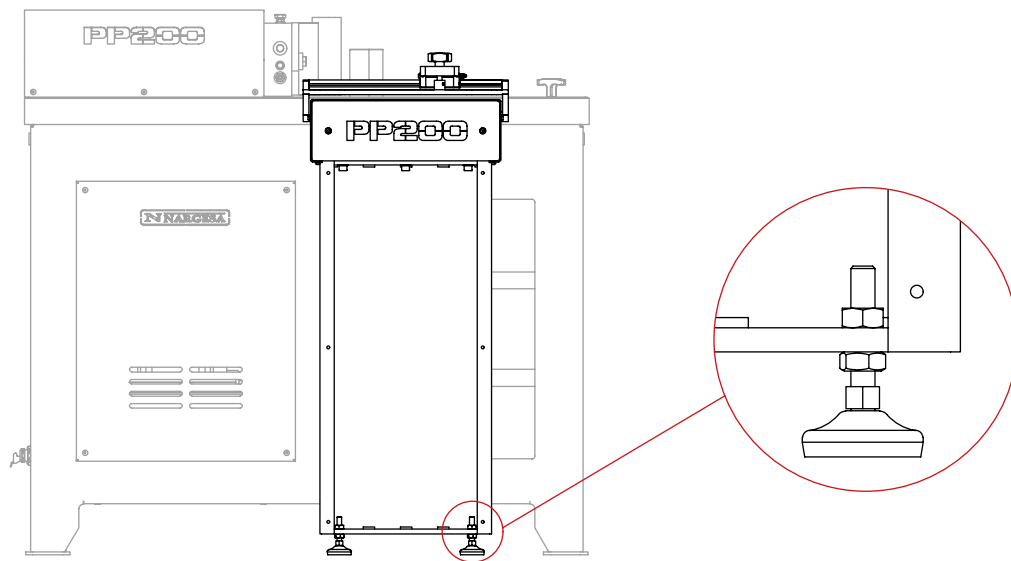


Figure 15. Final gauge levelling and detailed view of the adjustable legs

7. Do the electrical wiring and connect the gauge control to the machine next. The machine is prepared to easily do this with the multipolar male connector found inside the main body of the gauge which you would have found upon removing the top cover. Simply remove the neck under the front of the cover to get through it and make the connection with the female connector under the assembly interface on the PP200CNC Horizontal Press.

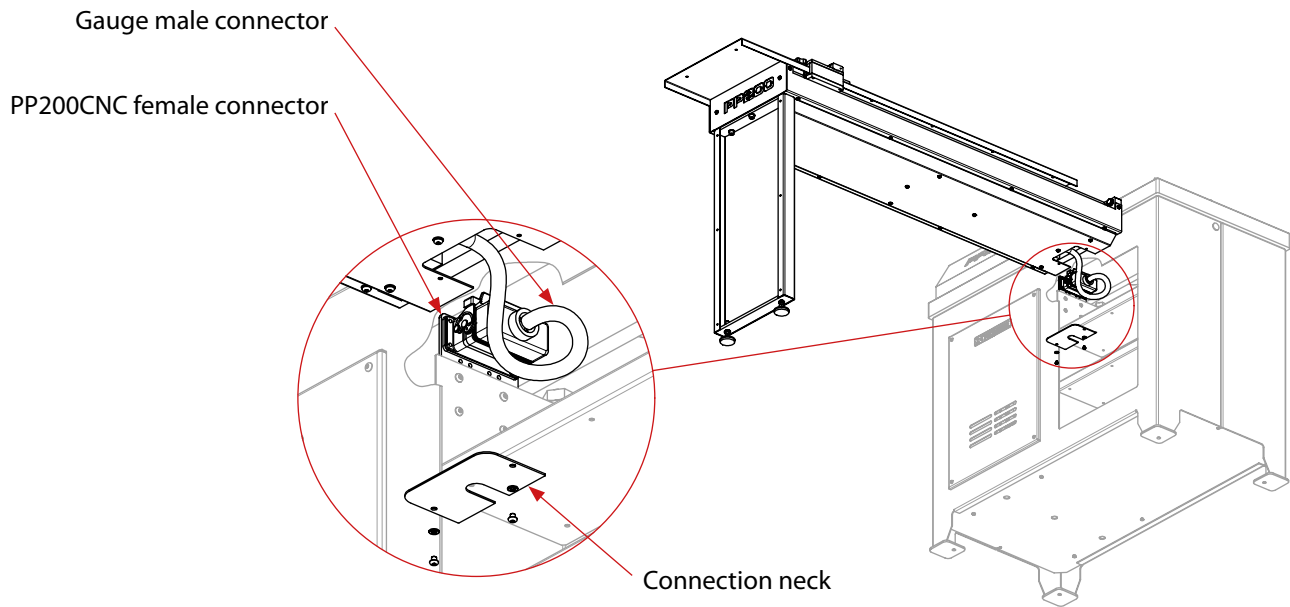


Figure 16. Electrical wiring and control connections from the gauge to the PP200CNC

8. Finally, put the top cover back on, and reposition the structural leg and connector neck in their original positions to finish assembling the gauge on the machine.

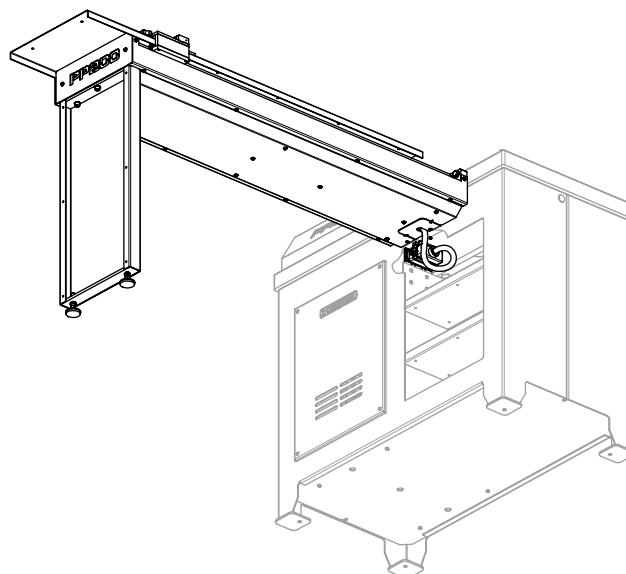


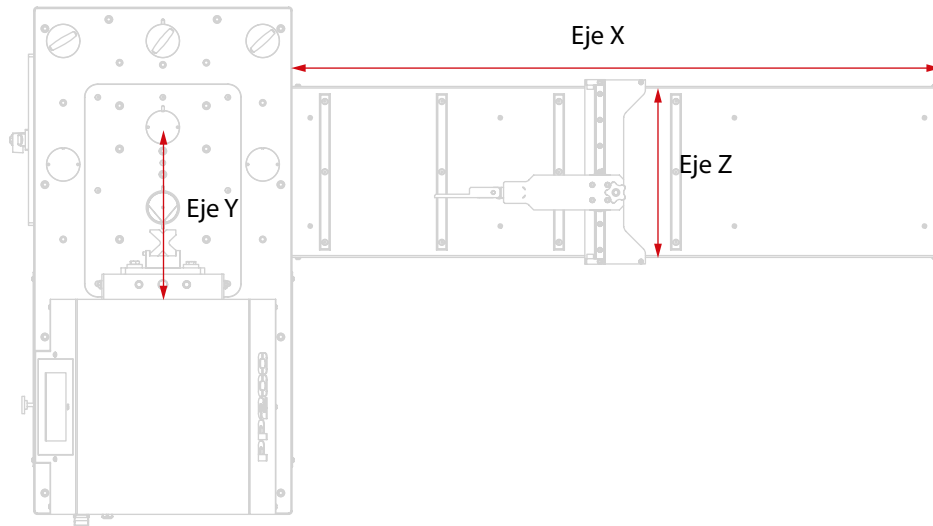
Figure 17. Reinstallation of the top covers, structural leg and connection neck

5. GAUGE CONFIGURATION


5.1. Axes

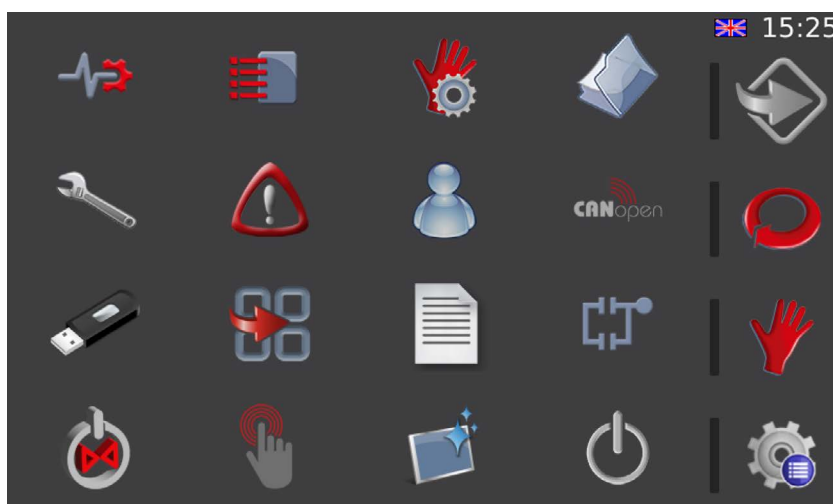
Before going into detail on how to activate and configure the automated gauge, you must understand the basic parts surrounding it: the machine axes and the gauge itself.


A full understanding of these parts essentially sets the foundation for effective and safe use of the tool.

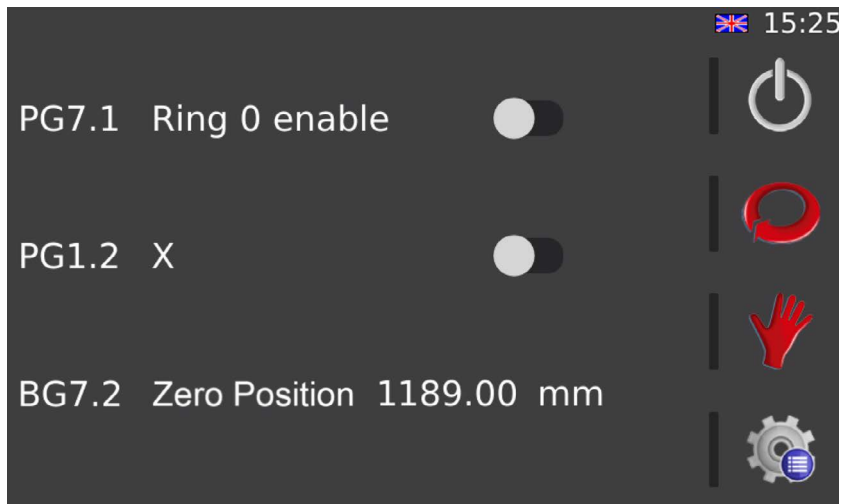


5.2. Activating the Gauge

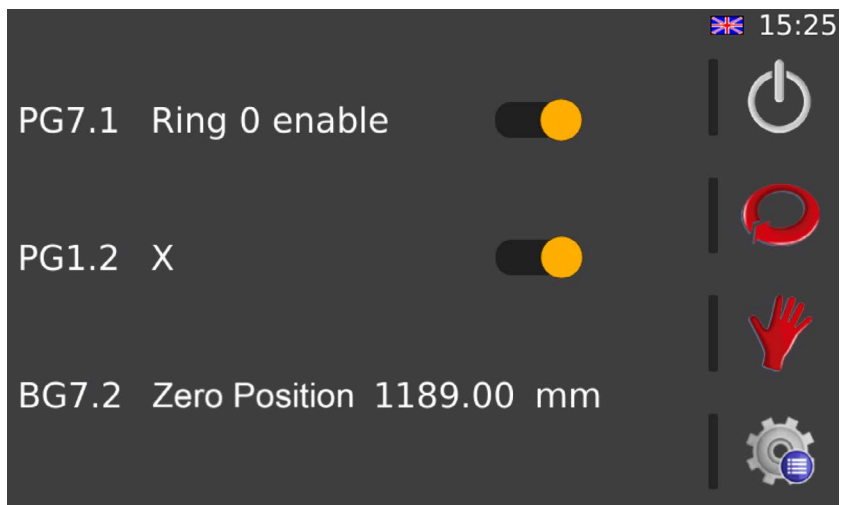
Once all connections have been made, start the machine and press the Menu key :



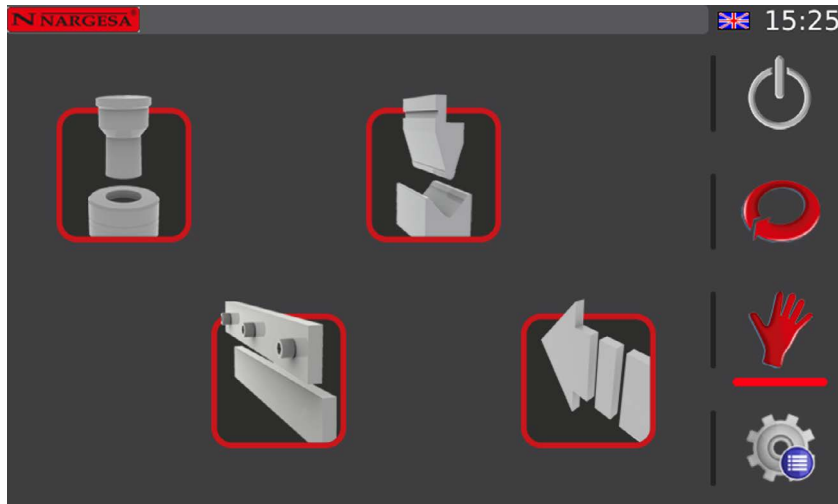
Press the key  and you'll see the following screen:



Activate the PG7.1 and PG1.2 parameters, as indicated below:



Once you've done this, you must fully restart the machine. In other words, fully disconnect all power to the machine and wait 1 minute to reconnect the power. You'll see this screen:




5.3. Setting Elevation 0 on the Gauge

Make sure the Z-axis is in a secure position. In other words, there is no collision with the machine, punches or die sets when it moves forward.

To set it to elevation 0, you must do so with the wedge positioner installed on the gauge. If this support is not found on the gauge, follow the instructions in section **6.2. Features of the Longitudinal and Cross-Sectional Cart**

There are a number of ways to set 0 on the X-axis of the machine, but this manual explains how to do so step-by-step using the standard tools:

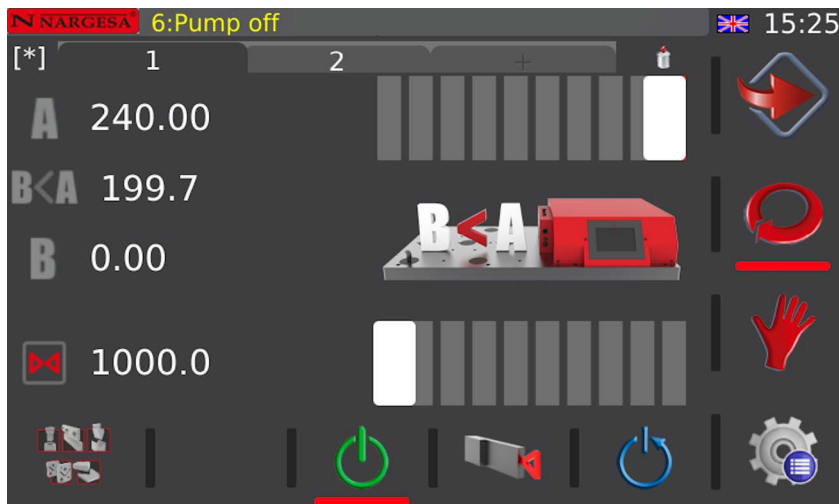
1. Insert the M.460R die set into the machine, which has four grooves: 16 mm, 22 mm 35 mm and 50 mm, with an angle of 85 degrees. This die set is square and has a height and width of 60 mm. Leave the screws on the die set support slightly tightened as the die set must be centered and adjustable.
2. Insert the P.70.80.R1.5 standard punch. This punch is 70 mm high with an angle of 80 degrees and a radius of 1.5 mm.
3. Decrease the machine pressure to a minimum. Read the section **POWER ADJUSTMENT** in the machine manual to find out how to do this.

4. Select Manual Mode by pressing this button  and entering the following elevations:


A 240

B 0



 1000



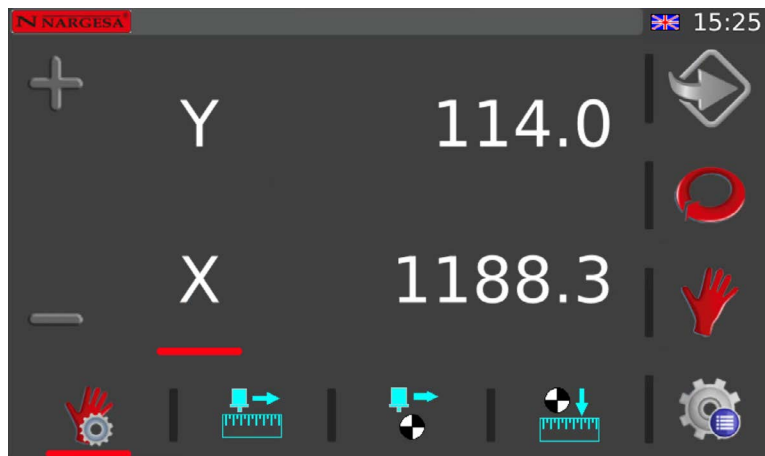
NOTE: When the hydraulic pump starts up, the gauge moves to the homing position.

4. In manual operation , move the die set until there is contact with the punch using the pedal. Then, with the machine completely inactive, you can tighten all the die set support screws.


5. Open up the space between the punch and die set to be able to insert a caliper to measure the gauge from the die set. Measuring the gauge position is not easy as it's the center punch position and is angled. This is why you should use this method.


6. Press  and start up the hydraulic pump with this button: 

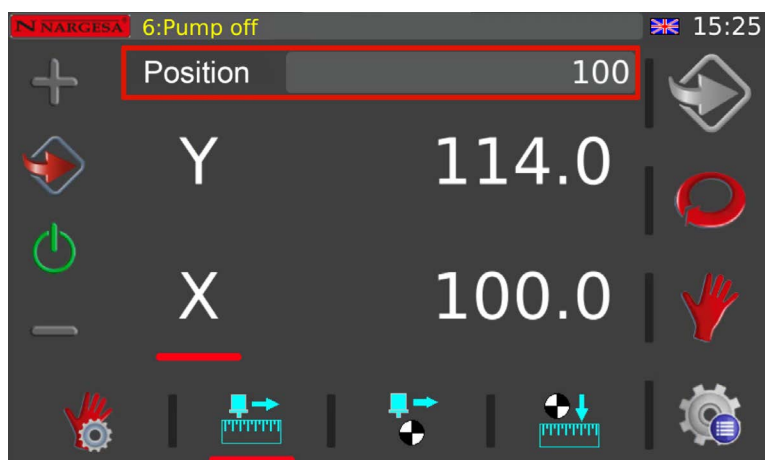
7. Press Menu  and press . Then you'll see this screen:



8. Choose the X-axis by pressing on the letter.

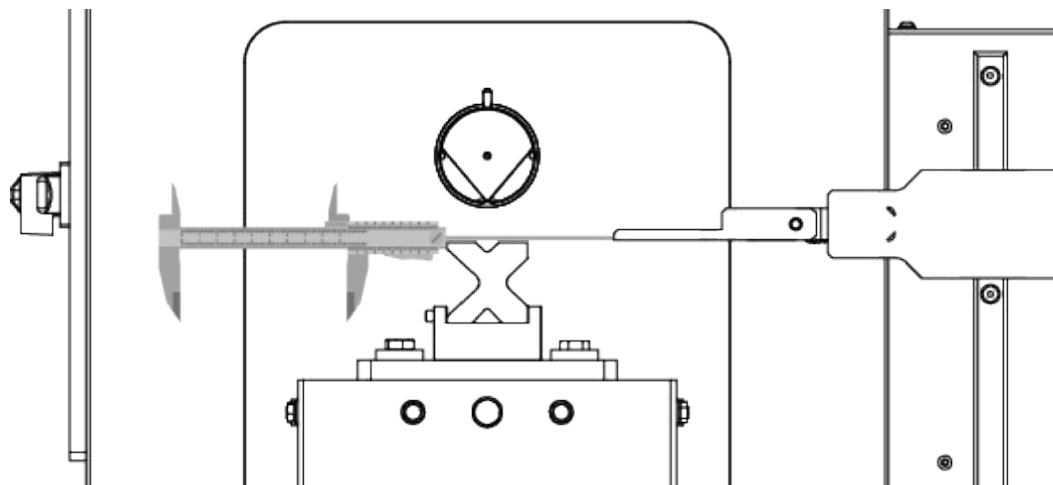
9. Press the key  to enter the elevation for the X-axis in the Position field.



10. Enter the elevation of 100 mm in the Position window and press .



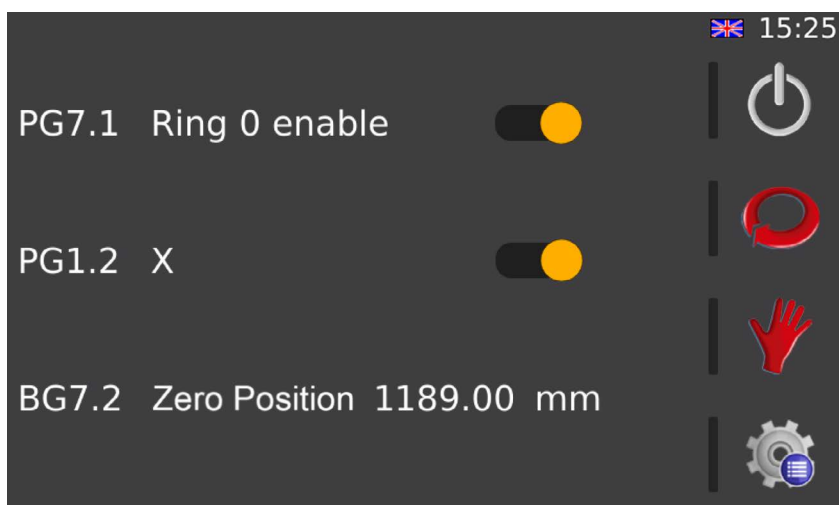
11. Now take the measurement from the end of the die set to the gauge.

To do this example operation, use the following as the measurement: 132.8 mm.



12. Press the Menu key again  and press .

The total elevation of the gauge appears in parameter BG7.2: 1189.0 mm.



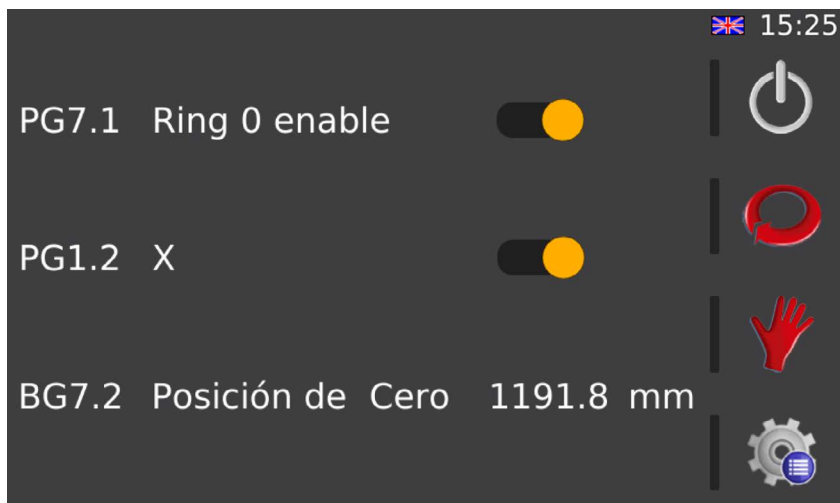
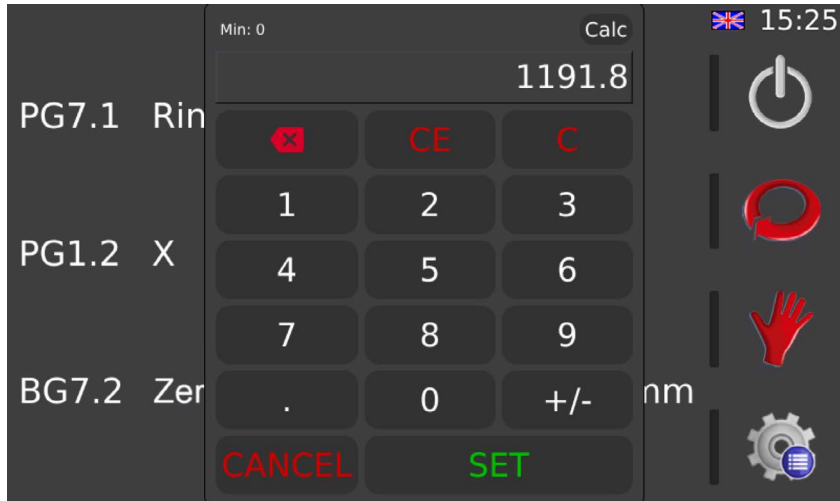
You should do the following calculation to determine the 0 point.



Remember that the measurement needed to do the calculation is the one between the center of the die set and the gauge. This measurement of 132.8 mm includes the 60 mm of the entire die set, so you must subtract half: 30 mm.

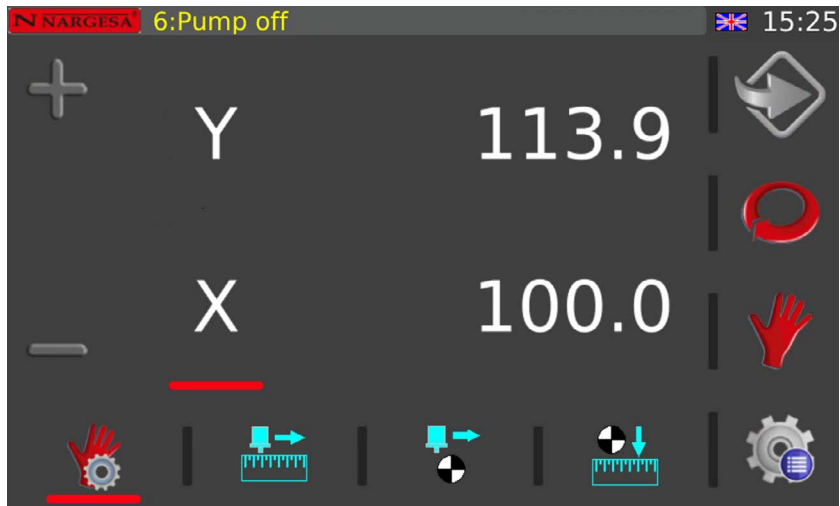
The result of 132.8 mm minus the 30 mm of the half of the die set indicates that the machine is at an elevation of 102.8 mm. A value of 100 mm was previously determined; therefore, the elevation only **differs by 2.8 mm** more.



The total elevation of the machine must be 1189.0 mm. Add the 2.8 mm calculated to this value for a result of 1191.8 mm.

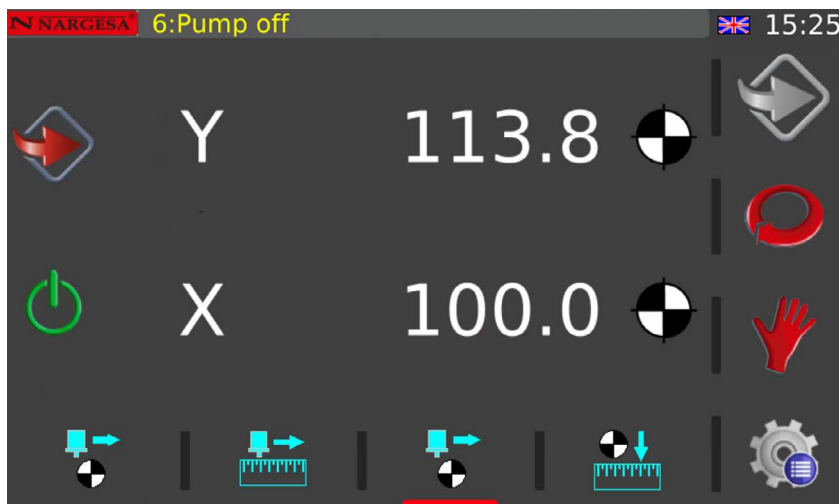
14. Enter this elevation in the BG7.2 parameter field and press **SET** to confirm.



15. After doing this, you must re-calibrate the gauge. Press Menu  and choose . You'll see this screen:



16. Press this button  and then this one . The machine will calibrate the gauge back. After doing this action, the gauge will be calibrated.



6. INSTRUCTIONS FOR USE

6.1. Gauge Features and Use

The PP200CNC Gauge is used to accurately select and position the desired working length when doing any of the operations carried out with the PP200CNC and its various accessories, whether during bending, punching, shearing or other operations.

6.2. Features of the Longitudinal and Cross-Sectional Cart

The gauge has two carts, one for each axis of movement. The longitudinal one is controlled by the digital machine control and works completely automatically. The cross-sectional cart is used manually to adapt as best as possible to the piece and work to be done with the PP200CNC.

The cross-sectional cart has an arm, which moves over a skid and a linear precision guide. Two piece positioning systems can be assembled over it, a wedge type and a flat type. They are chosen by the user based on the different pieces and operations to be worked on.

Plus, there's a manual brake system than can be enabled using a knob to fix the cross-sectional cart in the proper working position.

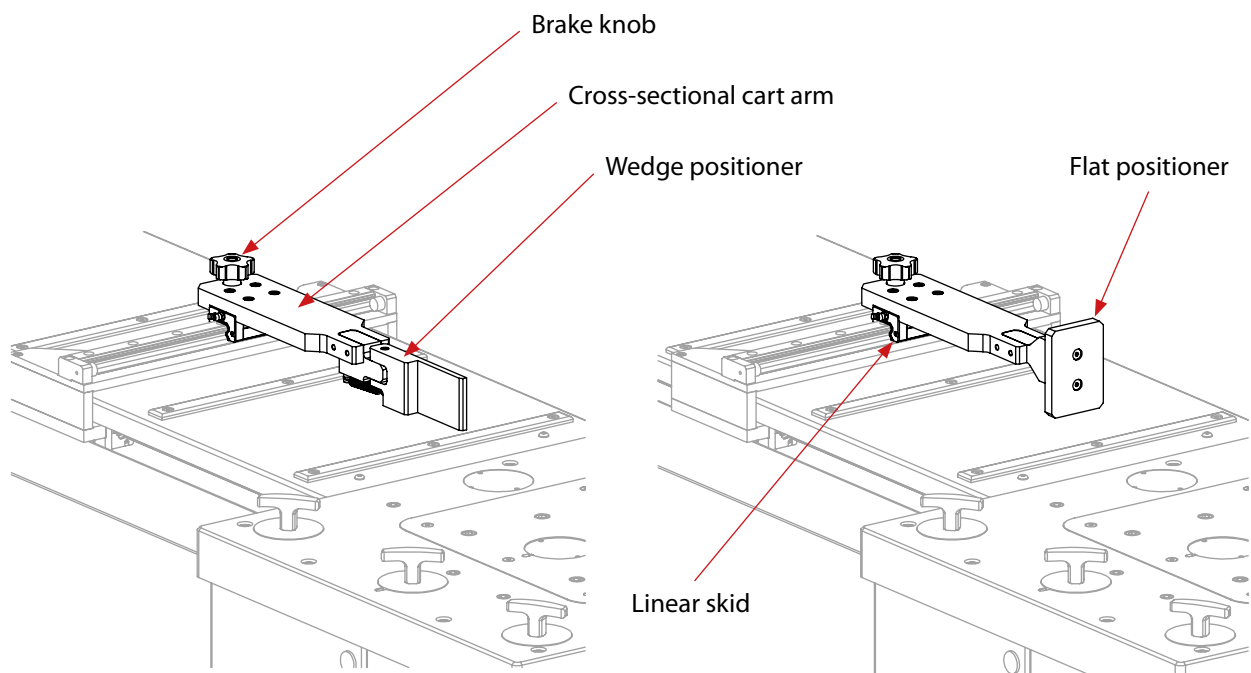


Figure 18. Different piece positioners for the cross-sectional cart arm

Both positioning systems come with the gauge. To be able to switch them, just remove the two ISO7379 screws on the end of the arm, which are used for both systems, and secure the corresponding support for each system.

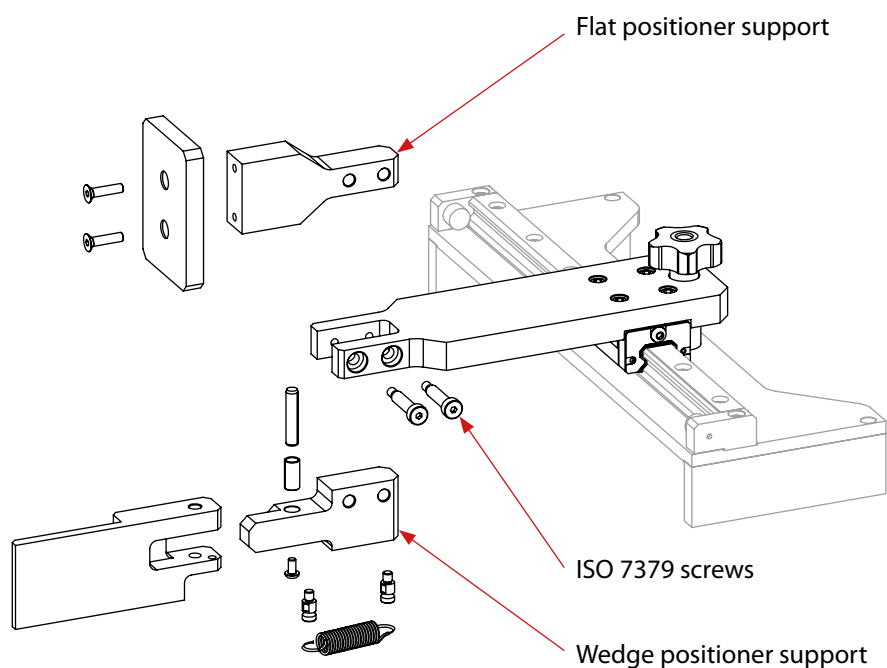


Figure 19. Detailed view of the assembly of the two piece positioning systems

6.3. Wedge Positioner

This type of positioner has been mainly designed for bending operations requiring a very small positioning distance. Nonetheless, the design allows you to work with the entire range of gauge lengths and any operation to be done: bending, shearing, curving... However, you get the most out of its shape and features in bending positions of just a few millimeters.

The wedge, or thinnest part of this positioner, can even be inserted within the bending die set area to bend with the minimum piece wing in accordance with the ratio of die set thickness and aperture.

The spring mechanism built into the bottom which works like a fuse, and the automated positioner withdrawal function which is controlled by the PP200CNC control ensure these types of short positioning operations can be done without any problems. The image below shows an example bend in 2 mm sheet metal with a V of 16 mm and a bending distance of 10.5 mm which corresponds to the minimum wing.

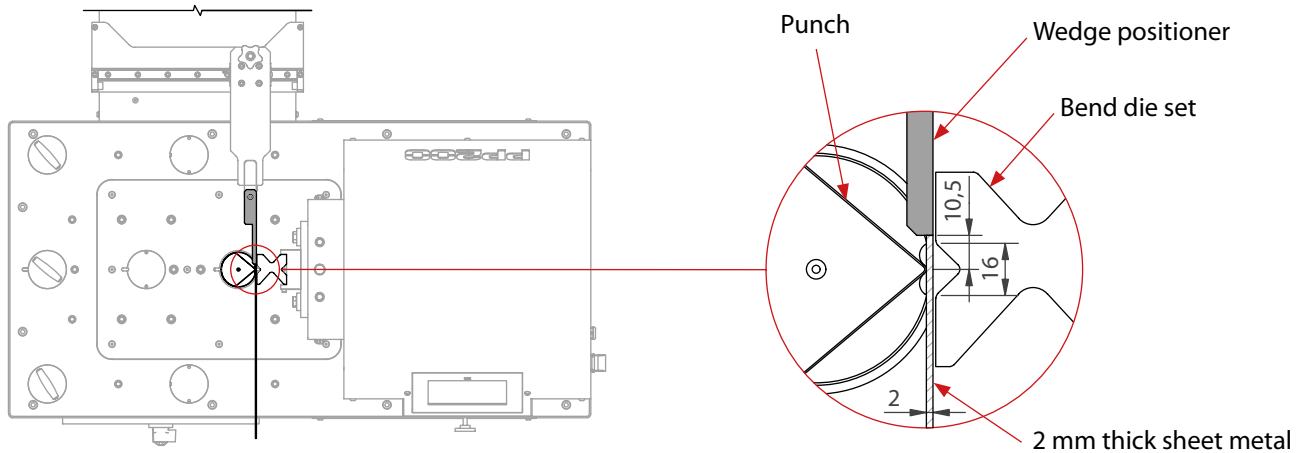


Figure 20. Detailed view of the positioning with the minimum wing for the 16 mm – 2 mm sheet metal V-die set

Only with these kinds of situations where the positioner is inside the width of the bending die set it is highly important to properly position the wedge by manually adjusting the cross-sectional cart.

The position must enable support for the piece during bending, but make sure the wedge is aligned or, if possible, further ahead than the side of the piece that will touch the die set at the start of the bending process.

This ensures that the die set will not move the positioner too much when moving forward to maintain the greatest positioning precision. The following image shows how the wedge positioner should be adjusted in such cases.

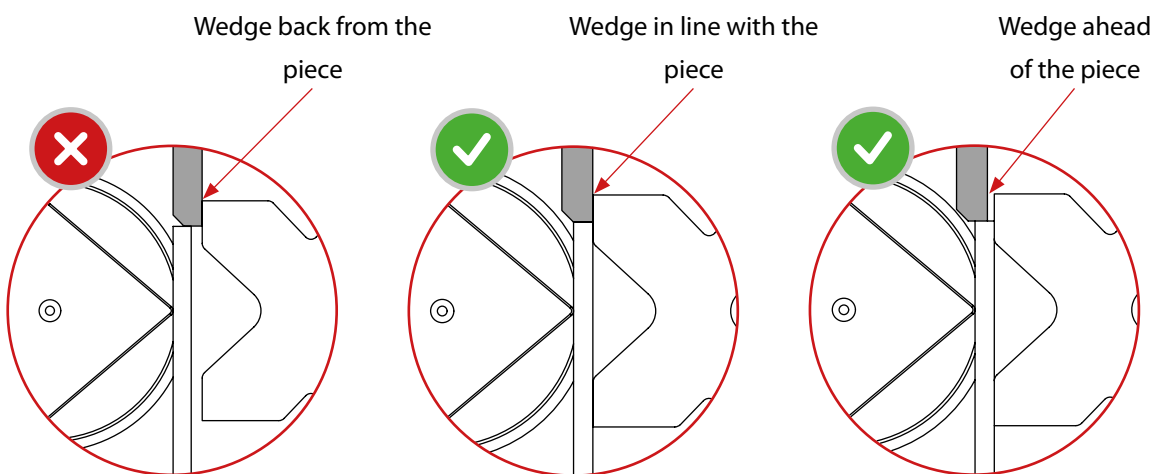
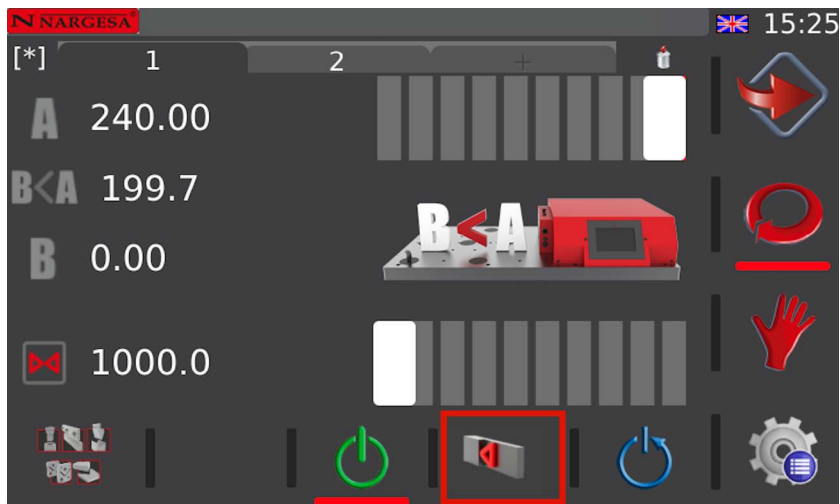


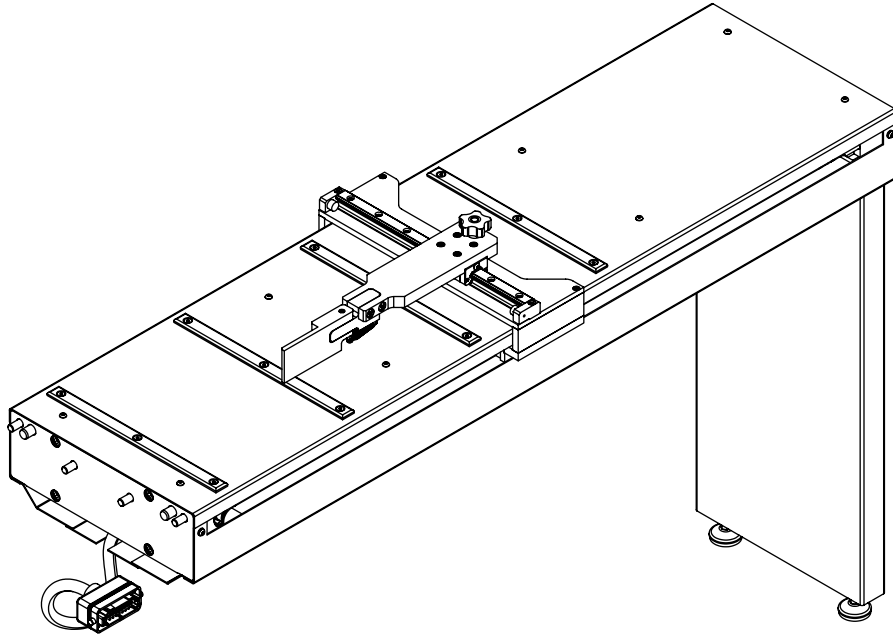
Figure 21. Detailed view of correct and incorrect adjustments of the wedge positioner

6.4. Flat Positioner

This type of positioner has a greater surface of contact with the piece and can facilitate positioning at large distances during bending operations. Likewise, this flat positioner is necessary when working with some of the PP200CNC accessories, such as the punching or curving tool where the piece remains at a certain height above the work table which would not be possible with the wedge positioner.

To work with this positioner, you need to indicate such circumstance to the machine CNC. Simply select the option by pressing the icon controlling the two types of positioner contacts as indicated in the following image.



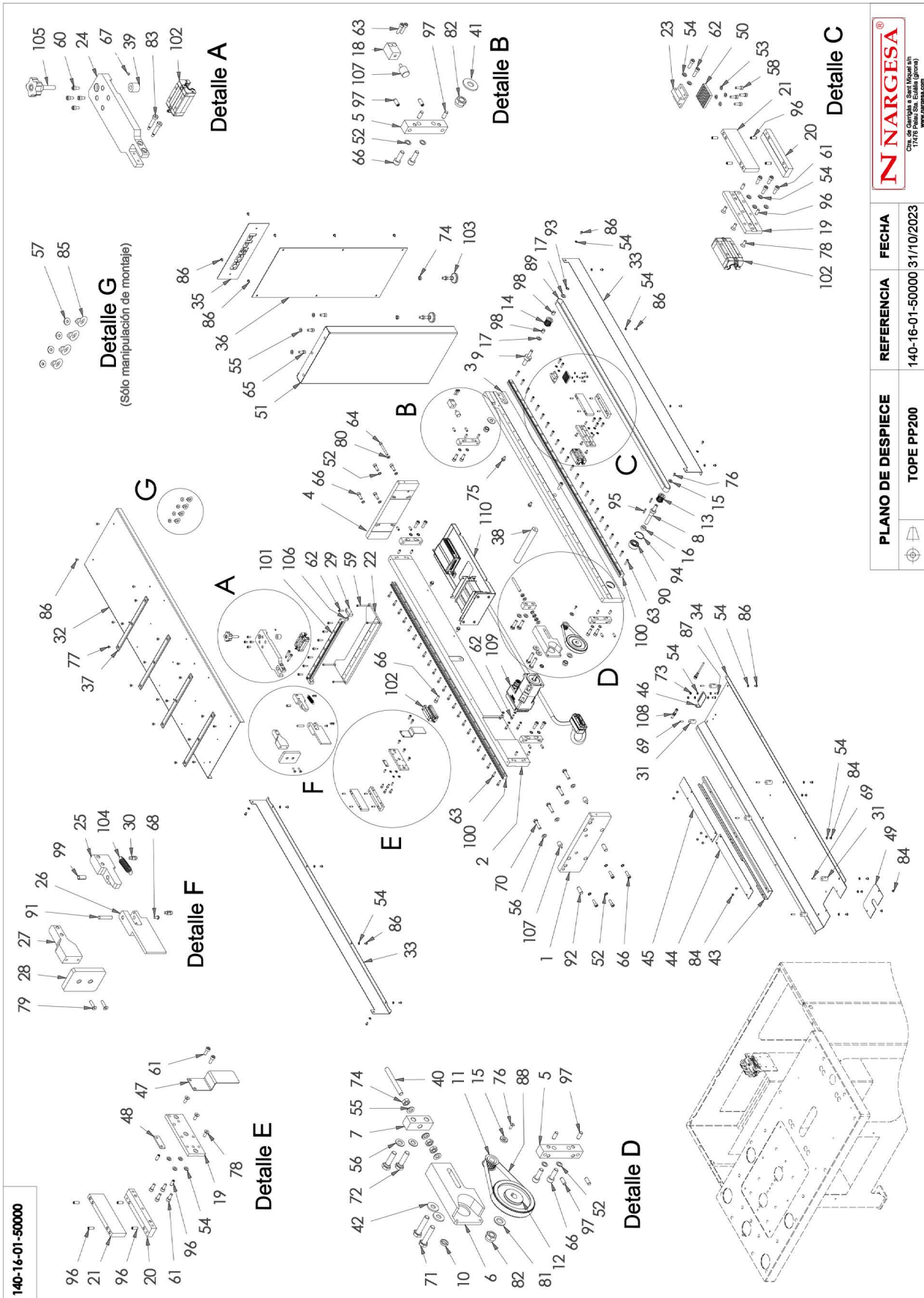


TECHNICAL ANNEX

Automated Gauge Horizontal Press Brake PP200 CNC

List of parts

A1. List of parts





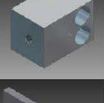
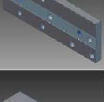
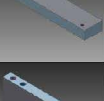
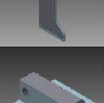
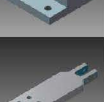





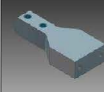


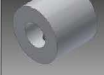
Este plano es propiedad de Prácticas Nargesa S.L. No podrá ser reproducido, comunicado a terceros o utilizado para otro fin que no sea el acordado sin su permiso escrito.
 C/da de Garrigás s/n - 17170 Palafrugell (Girona)

PLANO DE DESPIECE	REFERENCIA	FECHA
TOPE PP200	140-16-01-50000	31/10/2023


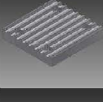
140-16-01-50000














Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
1		125-16-01-50001	Placa Frontal Amarre	1
2		125-16-01-50002	Montante Derecho - Tope PP200	1
3		125-16-01-50003	Montante Izquierdo - Tope PP200	1
4		125-16-01-50004	Placa Trasera	1
5		125-16-01-50005	Taco Union Perfiles	4
6		125-16-01-50006	Soporte Motor	1
7		125-16-01-50007	SOPORTE TENSOR MOTOR	1
8		125-16-01-50008	EJE POLEA DELANTERA	1
9		125-16-01-50009	Eje Polea Trasera	1
10		125-16-01-50010	SEPARADOR POLEA MOTOR	1
11		125-16-01-50011	Polea Motor - HTD5M-15-Z20	1
12		125-16-01-50012	Polea Reducción - HTD 5M-15-Z72	1
13		125-16-01-50013	Polea Motora - HTD5M-25-Z20	1


Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
14		125-16-01-50014	Polea Conducida - HTD 5M-15-Z20-A	1
15		125-16-01-50015	Tpa Polea	2
16		125-16-01-50016	SEPARADOR RODAMIENTO	1
17		125-16-01-50017	ARANDELA DE BRONCE 24x12x1.5	2
18		125-16-01-50018	Taco Tope Longitudinal	1
19		125-16-01-50019	Adaptador Patin Lineal	2
20		125-16-01-50020	Separador Horizontal Patin	2
21		125-16-01-50021	Separador Verical Patin	2
22		125-16-01-50022	Base Carro Ttrnasversal	1
23		125-16-01-50023	Pisador Correa Dentada	1
24		125-16-01-50024	Brazo Móvil	1
25		125-16-01-50025	Adaptador Tope "Finger"	1
26		125-16-01-50026	Finger Tope PP200	1

Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
27		125-16-01-50027	Adaptador Tope Placa	1
28		125-16-01-50028	Placa Tope	1
29		125-16-01-50029	Taco Tope Transversal	2
30		125-16-01-50030	Pivote Posicionador Muelle	2
31		125-16-01-50031	Separador Tapa Inferior	6
32		125-16-01-50032	Tapa Superior	1
33		125-16-01-50033	Tapas Laterales	2
34		125-16-01-50034	Tapa Inferior	1
35		125-16-01-50035	Tapa Estructura	1
36		125-16-01-50036	Tapa Peu	1
37		125-16-01-50037	Perfiles Antidesgaste	4
38		125-16-01-50038	Rigidizador Central	1
39		125-16-01-50039	Taco de Freno - Pomo	1

AUTOMATED GAUGE FOR THE PP200CNC HORIZONTAL PRESS BRAKE

Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
40		125-16-01-50040	VARILLA ROSCADA TENSOR	1
41		125-16-01-50048	Arandela Especial M16 - D40x3	1
42		125-16-01-50049	Arandela Especial M12 - D30x3	2
43		125-16-01-50101	Canal Pasacables Tope PP200	1
44		125-16-01-50102	Tapa A Canal Pasacables	1
45		125-16-01-50103	Tapa B Canal Pasacables	1
46		125-16-01-50105	Soporte Inductivo - Tope PP200	1
47		125-16-01-50106	Testigo Inductivo - Tope PP200	1
48		125-16-01-50107	Anclaje Testigo - Tope PP200	1
49		125-16-01-50108	Tapa Inferior Pasacables	1
50		125-16-01-50054	Placa Unión Correa HTD 5M - 25mm	1
51		131-16-01-50001	Estructura Pie Tope PP200	1
51.1		125-16-01-50045	Estructura Peu	1










Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
51.2		125-16-01-50046	Placa Superior Peu	1
51.3		125-16-01-50047	Placa Inferior Peu	1
52		020-AET-M10	Arandela Especial para DIN912 AET - M10	16
53		020-D125B-M5	ARANDELA DIN 125 B M5	4
54		020-D125B-M6	ARANDELA BISELADA DIN125B PARA M6	49
55		020-D125B-M10	Arandela Biselada DIN125B Para M10	6
56		020-D125B-M12	Arandela DIN 125 B M12	6
57		020-D34816-M6	Arandela Ancha Nylon DIN34816 - Para M6	4
58		020-D912-M5X16	TORNILLO ALLEN DIN 912 M5X16	4
59		020-D912-M5X60	TORNILLO ALLEN DIN 912 M5x60	4
60		020-D912-M6X12	TORNILLO ALLEN DIN912 M6X12	4
61		020-D912-M6X16	Tornillo Allen DIN912 M6X16	10
62		020-D912-M6X20	TORNILLO ALLEN DIN912 M6X20	15

Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
63		020-D912-M6X25	Tornillo Allen DIN912 M6X25	48
64		020-D912-M8X75	Tornillo Allen DIN912 M8X75	1
65		020-D912-M10X25	Tornillo Allen DIN912 M10X25	3
66		020-D912-M10X30	Tornillo Allen DIN 912 M10X30	18
67		020-D913-M6X6	Esparrago ALLEN DIN 913 M6X6	1
68		020-I7380-M5x10	TORNILLO ISO 7380 M5X10	1
69		020-D913-M6X20	ESPARRAGO ALLEN DIN 913 M6X20	6
70		020-D931-M12X50	TORNILLO HEXAGONAL MEDIA ROSCA DIN 931 M12X50	4
71		020-D931-M12X55	Tornillo Hexagonal DIN 931 M12X55	2
72		020-D933-M12X45	TORNILLO HEXAGONAL DIN 933 M12X45	2
73		020-D934-M6	Tuerca Hexagonal DIN934 M6	2
74		020-D934-M10	Tuerca Hexagonal DIN934 M10	5
75		020-D6921-M8X16	Tornillo Hexagonal Embridado Din6921 M8X16	4

Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
76		020-D7991-M5X15	Tornillo Allen Avellanado DIN7991 M5X16	2
77		020-D7991-M6X10	Tornillo Allen Avellanado DIN7991 M6X10	12
78		020-D7991-M6X16	TORNILLO ALLEN DIN 7991 M6X16	6
79		020-D7991-M6X25	TORNILLO ALLEN DIN 7991 M6X25	2
80		020-D125B-M8	Arandela Biselada DIN125B Para M8	1
81		020-D125B-M16	Arandela Biselada DIN125B Para M16	1
82		020-D985-M16	TUERCA DIN 985 M16	2
83		020-I7379-D8X30	Tornillo Guía ISO 7379 D8X30 - M6	2
84		020-I7380-M6X6	Tornillo Allen Abombado ISO7380 M6X6	13
85		020-D580-M6-ZN	Cáncamo Macho DIN580 - M6	4
86		020-I7380-M6X10	Tornillo Allen Abombado ISO 7380 M6X10	34
87		020-I7380-M6X16	Tornillo Allen Abombado ISO7380 M6X16	2
88		125-16-01-50052	Correa Dentada HTD5M - 15 - 500mm	1

AUTOMATED GAUGE FOR THE PP200CNC HORIZONTAL PRESS BRAKE

Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
89		125-16-01-50053	Correa Dentada HTD5M - 25 - 2694mm	1
90		030-CJ-00004	COJINETE 3204 D20xD47x20.6 2RS	1
91		030-D7979D-00006	PASADOR CILINDRICO DIN 7979D D8X40	1
92		030-D7979D-00020	Pasador Cilíndrico Con Rosca Int. DIN7979/D D16X40	2
93		030-D471-00002	CIRCLIP EJE DIN 471 Ø12x1	1
94		030-D472-D47	CIRCLIP AGUJERO DIN472 Ø47X1.75	1
95		030-D6885A-00012	CHAVETA PARALELA DIN 6885A 5X5X28	2
96		030-D7979D-00023	Pasador Cilíndrico Con Rosca Int. DIN7979/D D6X16	12
97		030-D7979D-00002	PASSADOR CILINDRICO DIN 7979D D8X20	16
98		030-DP-00006	DOLLA PARTIDA-12-14-15	2
99		030-DP-00066	DOLLA PARTIDA Ø8xØ10x20	1
100		125-16-01-50050	Guia Lineal - ISB-H R25 - L1360mm	2
101		125-16-01-50051	Guia Lineal - ISB-H R25 - L400mm	1

Elemento	Miniatura	Nº de pieza	Descripción	CTDAD
102		030-PL-00011	Patin lineal SNX25	3
103		031-PR-00001	Pie Regulable - Ø50 - M10x50	2
104		031-MUT-00001	Muelle Traccion 15x2.2x54.4 - Forma A	1
105		031-POMM-00010	Pomo Macho Lobulos Ø50 - M10x40	1
106		031-SIB-00012	Silentblock D10x15 - M4	2
107		031-SIB-00008	Silentblock D20x20 - Macho M6	3
108		050-IND-00004	DETECTOR INDUCTIVO DIELL M8 NC PNP-10-30 M12	1
109		050-SME-00009	Servo Motor ED4-085-050-010-011-60 (MTR.616.001)	1
110		050-KIE-1607-001	Kit Instalación Eléctrica - Tope PP200	1

OUR RANGE OF MACHINERY



IRON WORKERS



SECTION BENDING MACHINES



NON-MANDREL PIPE BENDER



HORIZONTAL PRESS BRAKES



TWISTING/SCROLL BENDING
MACHINES



HYDRAULIC PRESS BRAKES



HYDRAULIC SHEAR MACHINES



GAS FORGES



IRON EMBOSSING MACHINES



END WROUGHT IRON MACHINES



BROACHING MACHINES



POWER HAMMERS



PRESSES FOR LOCKS